

- 28 -

ABSTRACT

An acceleration sensor (22) to be calibrated and evaluated is affixed to one end surface (22) of a metal rod (1), and a plurality of projectiles (3) are made to impact the other end surface (2) of the metal rod at prescribed time intervals, generating an elastic wave pulse in the metal rod. Dynamic displacement, velocity or acceleration in a direction normal to the other end surface arising in a process of the generated elastic wave pulse reaching and being reflected by the one end surface where the acceleration sensor is affixed is measured, and an acceleration measured, processed and corrected by a strain gauge (25) attached to a side surface of the metal rod or by a laser interferometer (24) is obtained, and the corrected acceleration and the output of the acceleration sensor are compared to thereby carry out calibration and evaluation of the acceleration sensor.